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ABSTRACT

In industrialized countries, a fundamental shift in child bearing practices has resulted in an increase in the proportion of families with one child. Assumptions contributing to negative ideas about the single child include the notions of the deprivation of positive sibling influences and of debilitating, anxiety-ridden parenting by mothers and fathers of firstborns. Research findings in this area are confounded by a lack of coherent theories, heterogeneous sample selection, poor quality of research designs, and problems confronting new research methodology, such as meta-analysis. Conceptual synthesis is needed to bring this chaotic situation to order. This paper: (1) stresses a need to integrate the effects of significant others with existing theories; (2) underscores the need to assess critical factors affecting the nature and quality of parent-children interaction; (3) suggests that major aspects of school performance and adjustment be considered in the process of detecting the growth and modification of children's personalities; (4) emphasizes the necessity of controlling extraneous factors that contaminate current research; and (5) points to the priority of conducting large-sample studies in single socio-cultural settings before cross-cultural comparisons are made. (RH)

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THE SINGLE CHILD'S PERSONALITY DEVELOPMENT AND SCHOOL ADJUSTMENTS: SOME SUGGESTIONS FOR FUTURE RESEARCH

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INTRODUCTION

Among the western industrialized countries, there is a dramatic shift in the child bearing practices of women such that one-child families assume a higher and higher proportion than in the earlier decades (Taffell, 1977; Kasten, 1986). Historically, such a phenomenon was attributed to the period of economic hardship and war (Blake, 1981; Easterlin, 1978; Westoff, 1978) and more recently, to the high divorce rate, increased numbers of women in the labour market, and economic recessions (Westoff, 1978).

In a completely different social setting, China in 1979, also initiated one-child policy. With a population approaching one billion, the Chinese government perceives, indeed quite accurately, that unless the population growth is drastically regulated, there is little chance that her recent modernization process would succeed (Poston & Yu, 1985)

Whether family planning is self-motivated, reflecting current social and economic norms, or resulted from a government-sponsored social experimentation, it is important to realize that there has been fundamental change not only in the demographic structure, but also in the nature of socialization process within the family, personality development, and various aspects of school performance and even future development in adult characteristics (Polit, Nuttall & Nuttall, 1980). Given the radical changes that single children bring to the future of mankind,

there is little wonder that this area receives considerable attention and interest among sociologists, psychologists and educators around the world.

COMMON BELIEF AND RESEARCH FINDINGS

Popular polls (Fenton, 1928; Cutts & Moseley, 1954) and common conviction all paint single children in an extremely negative light, and there has been considerable social pressure on parents to have more than one child in the family (Griffith, 1973). Some have long believed that only children suffer substantial disadvantages because of their lack of siblings in their critical period of childhood development. They argue this disadvantage accounts for the formation of undesirable personality traits and impaired interpersonal relationships.

Among the list of personality descriptions associated with single children are: self-centred, self-willed, attention-seeking, dependent, temperamental, anxious, generally unhappy, unlikeable (Blake, 1974); Thompson, 1974), selfishness, unsociability, and spoiledness (Polit, Nuttall & Nutall, 1980). Magazines and newspapers describing only children in China, add to this list new colourful terms like "little emperors" (Baker,, 1987), "little suns" (China Daily, 1986) depicting with utter horror single children's egoistic, wilful and spoiled characteristics. Thus, the negative stereotype of the only child in the west as the "cultural truism" or the "unchallengable given" attains a "universal truism" when parallels can be drawn in another completely different culture.

Contributing greatly to these negative perceptions of single children are some of the pervasive assumptions that governed the earlier empirical investigations. Foremost in the list is the notion of de-

deprivation. If siblings provide critical learning experiences for each other, to be the only child in a family, then, must be deprived of valuable socialization in the critical stage of development. Many pieces of research (e.g. Fenton, 1928; Belmont, Wittes & Stein, 1976) make this assumption to account for the amount of maladjustment. Others (e.g. Minuchin, 1974) used the assumption to predict only children's lack of communication skills, autonomy and identity formation. There were still others who used the assumption to explain IQ discontinuties (Zajonc & Markus, 1975; Zajonc, 1983).

A second important assumption that is widely used to predict negative development of single children is the specific type of relationships their parents have established with them. In general, parent-child relationship for only and firstborns was typified by the high anxiety levels of their parents (Schachter, 1959) due to lack of childrearing experience (Waddell & Ball, 1980). Through this high anxiety, parents of the only child were supposed to be overly responsive, causing the only child to exhibit greater affiliativeness (Schachter, 1959). Consequently, undesirable outcomes in these single children, such as dependency and selfishness tended to follow.

These are assumptions that are by no means universally accepted, nor are findings from the recent empirical works consistent. The chief proponents of the first assumption, notably adherent to the confluence model (Zajonc & Markus, 1975), anchor intellectual development on sibling structure and they are being critically questioned (Ernst & Angst, 1983; Steelman, 1985). Indeed, following the detail review provided by Steelman (1985), the confluence model rested on precarious empirical support.

Advocates of the confluence model attribute "low ability and achievement decrease" of only children to "teaching handicap" which is expected to appear only around age 13. However, Steelman and Mercy (1980) found that the phenomenon to be true only if it were confined to families below the poverty line, and, Page and Grandon (1979) found the same phenomenon to be confined to white adolescents but not for their black counterparts. Two studies of Marjoribanks (1976) strongly suggest that parent/child interactions play a major role in cognitive development and mediate the impact of sibling structure. Indeed, if socioeconomic status, race, and the quality of parent/child relationship were controlled (Steelman, 1985), it seems that the first assumption would fall apart.

If we turn our attention to the recent research on single child-parent relationship, upon which the second assumption is based, we discover that the same responsive behaviors of parents have promoted greater achievement motivation, internal locus of control (Falbo, 1984), intellectual development and achievement (Blake, 1981; Falbo & Cooper, 1980).

Based on the meta-analysis of 115 studies, Falbo and Polit (1986) provided a detailed and convincing alternative interpretation of the only borns and their relationships with the parents. They argue that parental anxiety motivates parents to have high-quality interactions with their children. They felt that inexperience in child rearing also might lead parents to have higher expectations for their children; there has been evidence that these heightened expectations have extended beyond this early period (e.g. Clausen, 1966; Kammeyer, 1967). They further reasoned that the recognition that their child is the only one they will ever have

motivates them to establish and maintain positive relationships with their child. Additional parental attention apparently aids the child in acquiring more sophisticated intellectual skills, such as vocabulary, as well as more mature behavior patterns, and for the same reasons, their only child will be encouraged to take greater care of his/her health and participate in extra-curricular activities.

In terms of sociability, Falbo and Polit (1986) further discovered that when the data (need for affiliation scales), were secured from self-report, only borns scored lower than others. However, when they were based on the evaluations of other (e.g. peer ratings) only borns scored as high as other children. Claudy (1984) reported that only borns spent more time in solitary, intellectual and artistic activities and less time in group-oriented and practical activities than did their peers with siblings. Connors (1963) explained the lowered need for affiliation among only children as a result of large amounts of affection they receive from their parents. Nonetheless, the preponderance of evidence suggests that the onlys do not suffer as a consequence of their self-reported lowered sociability. Nor do they have lower levels of self-esteem (Falbo, 1981, 1984).

From repeated findings that education is inversely related to fertility (Bumpass & Westoff, 1970; Westoff & Ryder, 1977), one may further infer that parents of greater intelligence and education prefer to have one of a fewer children. If this inference is correct, there is additional evidence to support the viewpoint of Falbo and Polit (1986) that parent-child relationship in single child-families facilitate the development of achievement, intelligence and character.

PROBLEMS RELATED TO EXISTING RESEARCH

What emerges from this literature review is that the effect of sibling structure and the associated first assumption may not have much credibility. Challenges to the second assumption are silent on the possibility that closer relationship between parents and their single children could also lead to the undesirable characteristics like dependability, ego-centricity, self-willedness, and temperamentality that are commonly observed. The accumulating evidence against the second assumption amounts to primarily a drastic overhaul of the unfair one-sided negative interpretations of single children. Past efforts to bring to order the chaotic body of conflicting literature tend to be side-tracked into the testing of minor hypothesis, as examplified by theoretical debates between those who are for or against the confluence model.

Aside from the tendency of side-stepping the major issues, there are several plausible reasons that account for the confusion of findings in this critical area.

A. LACK OF COHERENT THEORIES

First and foremost is the absence of a macro-theory that integrates the multitude of factors already studies but given inconsistent interpretations. One finds that the existing empirical investigations fall into three categories:

Those who dwell on formal theories tend to derive conceptualizations dealing with restricted concerns. Thus people entrenched in social comparison theory (e.g. Zimbardo & Formica, 1963) focused their attention on the relation between self-esteem and birth order. Those that

advocate the confluence model (Zajonc & Markus, 1975) were primarily interested in confirming the negative correlation between family size and intelligence.

Worse than the narrow frames are a considerable amount of literature in this area that are based on some biased presumptions (as witnessed in the earlier sections) which collect data simply to justify their entrenched assumptions. This accounts for a high degree of inconsistency in their findings.

Worst of all is a large number of works that were motivated by either curiosity (Burke, 1956; Fenton, 1928) or convenience (e.g. Scholler, 1972). Totally unconcerned about the theoretical origins, these studies appear to be prompted by curiosity concerning selected aspects between single children and those with siblings and proceeded to investigate on them. Or, it so happened that in their samples, information on the family size was already obtained and it was a matter of convenience to undertake additional analysis.

B. HETEROGENOUS SAMPLE SELECTION

Close scrutiny of the samples selected provides clues to the inconsistency of findings reported. The study completed by Nuttall, Nuttall, Polit and Hunter (1976) on effects of family size and birth order on the academic achievement, for instance, drew samples of 553 boys and girls primarily from white, intact, middle to supper-middle class families. Ernst & Angst drew their samples from 19 and 20 year-old males and females who lived in Zurich, Switzerland. Page & Grandon (1979) obtained their sample from U.S. national sample of high school seniors in 1972.

Velandia, Grandon and Page (1978) secured their sample from 17 and 18 year-old college applicants in Columbia, South America. Gailbraith (1982) selected his sample from one American university. Poston and Yu (1985) extracted their 1969 sample from Changsha, Hunan Province, China.

Within this small sample of studies, one notes readily not only the wide latitude of age ranges of subjects, but also the diversity of ethnic origins from which the subjects were extracted. If by miracle, some consistency of findings were reported, a universal law would be in the making. In reality, comparison of results from the heterogenity of samples amounts to comparison of apples and oranges. Any attempts of integrating the findings only confuses rather than clarifies the issue at hand.

C. POOR QUALITY OF RESEARCH DESIGNS

It seems evident that the quality of research done on the only borns is not high. When Falbo and Polit (1986) attempted to do a quantitative review of the only child on five criteria: large sample size (i.e. greater than 500), use of probability sampling, controls for extraneous variables, sophisticated analytic approach and, use of established instruments, only 115 out of 200 studies managed to pass the test. Some 85 or 43% of the total sample were eliminated for failing to satisfy all the criteria.

D. PROBLEMS CONFRONTING NEW METHODOLOGY OF RESEARCH

With the arrival of Meta-analysis (Glass, MaGaw & Smith, 1981) which utilizes study findings as a secondary order of analysis, and has much potential to make sense inconsistency of research results, there are some fundamental problems that still await to be overcome. Quantitative comparisons of different studies depend heavily on the calculation of effect

size. Given older studies tended to rely on analysis of variance, tests, chi-square tests, more recent studies often use regression procedures, producing results in aggregated, correlation form, so that no effect size can be computed. As Falbo and Polit (1986) admitted, their generalized findings tended to be based more on older studies than new. This failure to include recent studies creates a bias and some fundamental weakness that is difficult to rectify.

SOME SUGGESTIONS

To bring this chaotic situation into some order, we must begin by undertaking some conceptual systhesis. Over the years, in other disciplines, we have seen that even the dialectically opposed theories underwent some degree of integration. In the field of educational administration, for instance, the classical scientific management school merged with the human relation school to forge the structuralist school (Etzioni, 1964). In psychology, there is a parallel compromise between behavioral psychologists and cognitive psychologists in interpreting the function of the mind. There should be no exception that in the early childhood education, the narrowly focused theories can be broadened so that various interpretations of children's personality development would not become mutually exclusive of one another.

In developing the envisioned broader-based theory, several additional assumptions and principles should be considered. As well, the personality impact and modification in school need to be more systematically analyzed.

A. ADDITIONAL ASSUMPTIONS AND PRINCIPLES TO BE CONSIDERED

In terms of assumptions, the role of the "significant others", widely documented in literature (e.g. Cornell & Grossberg, 1987; Saltiel,

1986; Wilcoxon, 1987; Wilks, 1986) needs to be fully integrated with integrated with existing theories. In every stage of children's personality development, there are primary and secondary sources of influence from "significant others". It is, perhaps, not incorrect to assume that the determination of which is "primary" and which is "secondary" source of influence on a child's early stage of development rests, to a large extent, on the frequency and quality of contact (Klass, 1987) and on the degrees of ability to dispence reward and punishment for shaping the characters of children. In a typical family, parent(s) are the primary source of influence and the sibling influence (if there is more than one child) is secondary. Whether parent(s) exert positive impact (quality interaction and concern) or negative influence (e.g. indulgence)--a controversy in the current research --depend largely on parents' status (single or otherwise), parents' socio-economic status (occupation, income and social prestige), their educational levels, their ethnic origins, and the choice of residential locations (inner-city, suburban, and rural). These factors have been cited as determinant of child-rearing patterns (e.g. Sears, 1957; Barnett, 1984; Chase, 1985). As well, children's gender, and levels of maturity which at times precondition their family experiences and their subsequent I.Q. development are all critical factors accounting for the variation of family experiences and children's initial stage of personality development. In-depth qualitative and quantitative investigations have to be zeroed in on this area before a detailed pattern can be identified.

In the second stage of children's development, (i.e. entry to school), it is also assumed that more "significant others" enter the sphere of

influence vying for prodominance in molding the character of children. In addition to the parent(s), and at times siblings, there are now teachers, school administrators and classmates. Admidst the divergent pulls and pushes, personality development is the outcome of accommodation and assimilation of values and expectations that approximate those already acquired in their first stage of development. In other words, children's personality gravitates towards the set of expectations that children are most accustomed to or that requires the least adjustment. Where there is a conflict of values and expectations from the "significant others", between the family and school sources, for instance, it is assumed there will likely be problems of maladjustment on the part of the children in the school setting.

Within the broad context of assumptions where almost infinite combinations of family and school experiences might exist, it is crucial, as a first principle, to avoid piecemeal approach, as are most of the cases in existing research. In other words, pertinent, variables affecting children's development (only borns as well as those with siblings) have to be encompassed.

As a second principle, all these crucial stages have to be chronologically analyzed, given that personality development is assumed to be cumulative in nature. This requires our analysis of children's personality and educational development to be undertaken in a longitudinal perspective, which is enigmatically missing from most the research done on this topic.

As a third principle, conceivable extraneous factors (i.e. location of residence, ethnicity, social classes) already cited in the foregoing

paragraphs that affect the personality and academic developments of children within any single culture must be taken into consideration. Otherwise, inappropriate comparisons and contamination of results will follow when these variables are not statistically controlled.

Additionally, given that each society exerts a considerable influence on what is an acceptable practice of childbearing and what is not, samples, preferably large ones, should be drawn from ONE socio-cultural setting. In this context, additional extraneous factors such as national norms, historical and cultural factors can be controlled and preserved for cross-cultural comparisons.

B. PERSONALITY AND SCHOOL EXPERIENCE

In examining school experience, not only should we focus the effects of more significant others in shaping the early stage of childrens' personality development as indicated in the foregoing section, we should also begin to explore how initial personality affect their performance and subsequent adjustment in school. Conceptually, children's personality (onlyborns versus children with siblings) upon the arrival of school, may encompass varying degrees of traits: achievement-orientedness, intelligence, creativity, maturity, aggressiveness, dogmatism, dependency, self-conceit, attention-seeking, internality, and friendliness. These are bound to generate differential effects on all aspects of children's performance in school: cognitive, affective and psychomotor domains, as well as their relationship with peer, teachers and school administrators.

In terms of the cognitive domain, not only should we compare the achievement of the onlyborns and those with siblings, we should also pay attention to the relative proportion of each group falling into the

under-achieved or over-achieved categories. In this fashion, we can verify the relative roles personality traits (particularly achievement-orientedness, intelligence, creativity, maturity, attention-seeking tendency) play in shaping the academic performance and problem-solving abilities of the onlyborns versus those with siblings.

In the affective domain, we could detect how the presence or absence of other aspects of personality traits such as aggressiveness, dogmation, dependency, self-conceit, internality affect the socialization process of the onlyborns, compared with those with siblings, and how these influence their perception and attitudes toward the peer, teachers, and the school. At the same time, through the assessment of teachers on onlyborns and other children in this domain, we can also detect the compatibility of values and expectation between the family and school, and the relative degree of adjustment problems onlyborn children and those with siblings encounter.

Placing the adjustment problems on a longitidinal basis, or cross-sectional comparison covering a wide span of levels and grades in school (from primary, intermediate, junior high to senior high), we can further derive another valuable piece of information, i.e. the modification effects of teachers and classmates on the initial personality of children with and without siblings. Intuitively, this furnishes a critical area for us to reexamine and perhaps, refine our second assumption regarding the relative ascendency of "significant others" as they increase in number in the second stage of children's life. Given there is such a self-corrective mechanism inherently in the model, its validity will be much enhanced.

The psychomotor domain provides another area where personality traits of the onlyborns versus other children are manifested through their overt behaviors. Indeed, their relative independence in task completion, their social skill in making friends, their ability or lack of ability in self-discipline, and their various work habits, all cast light on children's personality. This satisfies the explicit principle of the present attempt to be as all-encompassing as possible, allowing internal validation to take place.

CONCLUSION

In face of the confusion and inconsistency of findings related to onlyborns and children with sibling, I would follow some contemporary observers (Ernst & Angst, 1983; Schooler, 1972) to call a moratorium on this area of research. To their voice, I should add that until such time we have accomplished conceptual reconsideration, it will be futile to pursue issues in this critical area in a piecemeal approach. In search of a fresh attempt to reconceptualization, the present paper stresses a need to integrate the effects of significant others with existing theories. It underscores the need to assess critical factors affecting the nature and quality of parent-children interaction to avoid conflictng interpretations of family experience. It suggests the desirability of considering major aspects of school performance and adjustment as a means of detecting the growth and modification of children's personality in a longitudinal perspective. It emphasizes the necessity of controlling extraneous factors that contaminate current research. It points to the priority of conducting studies, hopefully with large samples, within one single cocio-cultural setting so that culturally-specific pattern in any one

single society can be obtained before cross-cultural comparison should be undertaken. It is only through these efforts that accurate accounts of onlyborns and those with siblings could be brought to light.

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